

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

By this Amendment, Claims 1-20 are cancelled. New Claims 21-35 are added for consideration.

Claim Objections

The Official Action objected to claims 9 and 17 as being dependent from a cancelled claim and the term "neutral graphite". As noted above, these claims are now canceled, and these objections are moot.

Rejections Under 35 U.S.C. § 103(a)

Claims 1-7 and 9-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over JP-2001-093551 ("JP ' 551") in view of Yamada et al. ("Yamada", U.S. Patent No. 5,432,023). The Official Action interprets JP '551 as disclosing an occluding element absorbing a liquid fuel filling an area within the fuel reservoir, and as also disclosing a fuel feeder having an infiltration structure.

New Claim 21 recites, in combination with the other claimed elements, that the fuel cell comprises a fuel reservoir which stores at least a part of liquid fuel by an occluding element formed of a porous material and/or bundled fibers presenting capillarity. Additionally, Claim 21 provides for a fuel feeder having an infiltration structure and the fuel feeder is formed of a porous material and/or bundled fibers. Thus, both the occluding element and the fuel feeder are formed of porous materials and/or bundled fibers. In contrast, JP '551 discloses that while fuel is fed to cells

through a capillary force, the capillary comes either solely from the introduction tube 3, or through a liquid osmosis ingredient that fills the introduction tube. Thus, JP '551 discloses only the introductory tube, identified as the fuel feeder, as being made of a porous material and/or bundled fiber. The Official Action relies on the same passage (paragraph [0012]) in the machine translation of JP '551 in an attempt to support the position that JP '551 discloses both an occluding element and a fuel feeder made of porous material and/or bundled fibers. However, this passage speaks only to the introduction tube, and a material that it may be filled with, and not an occluding element in the fuel reservoir. It appears the Official Action has improperly relied on the same feature in JP '551 in an attempt to satisfy two separate elements present in the claims. Because JP '551 lacks an occluding element in the fuel reservoir in combination with a fuel feeder made from a porous material and/or bundled fibers, JP '551 also does not disclose that at least a portion of the liquid fuel is stored in the occluding element.

In the specification of the instant application, an embodiment to which the claims are not limited shows a fuel reservoir 10 containing an occluding element 10a made from a porous material and/or bundled fiber. The fuel feeder 30 extends into the reservoir 10, and is also made from a porous material or bundled fibers. To the extent the fuel feeder 30 is analogous to the introductory tube 3 in JP '551, there is no element in JP '551 that corresponds to the occluding element 10a described in the specification.

Claim 21 further provides for a fuel supply system for supplying liquid fuel from the fuel reservoir to the fuel feeder includes a valve element and/or collector element. The Official Action cites element 23 in Figure 12 of JP '551 to meet this

limitation. However, this embodiment does not show an occluding element in the fuel reservoir storing at least part of the liquid fuel. Thus, Figure 12 of JP '551 fails to show the fuel supply system including a valve element and/or collector element in combination with the occluding element formed of a porous material and/or bundled fibers and a fuel feeder formed of a porous material and/or bundled fibers, as recited in Claim 21. It is respectfully submitted that the rejection of Claim 21 should be withdrawn.

Claim 22 recites that the fuel cell includes, *inter alia*, a fuel reservoir which stores a whole portion of liquid fuel by an occluding element formed of a porous material and/or bundled fibers, and a fuel feeder having an infiltration system formed of a porous material and/or bundled fibers presenting capillarity.

As noted above, JP '551 does not disclose the fuel cell to include both an occluding element in the fuel reservoir made of a porous material and/or bundled fibers and a fuel feeder made of a porous material and/or bundled fiber.

Additionally, JP '551 does not show the occluding element where a whole portion of the liquid fuel is stored in the fuel reservoir. To the extent that any embodiment of JP '551 shows an occluding element in the fuel reservoir, nowhere does JP '551 disclose that this element stores the whole portion of liquid fuel in the reservoir. In contrast to the claimed arrangement, each embodiment of JP '551 shows the liquid fuel stored in a free state.

Claim 22 further provides for a fuel supply system for supplying liquid fuel from the fuel reservoir to the fuel feeder including a valve element or collector element. As noted above, the Official Action relies on element 23 as shown in the embodiment of Figure 12 of JP '551 to show this feature. However, this embodiment

does not show an occluding element in the fuel reservoir storing a whole portion of the liquid fuel. Thus, Figure 12 of JP '551 fails to show the fuel supply system including a valve element and/or collector element in combination with the occluding element formed of a porous material and/or bundled fibers and a fuel feeder formed of a porous material and/or bundled fibers, as recited in Claim 22. It is respectfully submitted that the rejection of Claim 22 should be withdrawn.

Claim 29 provides, *inter alia*, for a fuel cell including a fuel reservoir which stores a whole portion of liquid fuel by an occluding element formed of a porous material and/or bundled fibers, and a fuel feeder formed of a porous material and/or bundled fiber. As noted above in the discussion of Claims 22 and 29, JP '551 does not disclose a fuel cell having both an occluding element of a porous material and/or bundled fiber and a fuel feeder formed of a porous and/or fibrous material.

Further, as noted above in the discussion of Claim 22, JP '551 does not disclose a fuel reservoir in which the whole portion of liquid fuel is stored by the occluding element. It is respectfully submitted that the rejection of Claim 29 should be withdrawn.

Even if it were obvious to combine JP '551 and Yamada, the deficiencies discussed above are still not overcome. For at least the reasons above, Applicants respectfully submit that the rejections based on the combination of JP '551 and Yamada should be withdrawn, and the claims are in condition for allowance.

Claims 23-28 and 30-35 ultimately depend from Claims 21, 22 and 29, which are allowable. For at least this reason, these claims are also allowable.

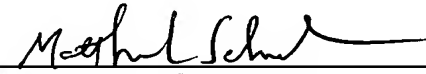
Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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